

What is claimed is:

1. An optical receiver, comprising:

a photo diode for receiving signal light and generating a photo current corresponding to the signal light;

5 a first current mirror circuit having a pair of current path, the photo diode being connected to one of the current path;

a second current mirror circuit having a pair of current path, a first terminal, a second terminal, a third terminal and a fourth terminal, the first and second terminals being connected to one of the paired current path at each ends thereof, the third and fourth terminal being connected to the other of the paired current path at each ends thereof, the first terminal being connected to the other of the paired current path of the first current mirror circuit;

15 a signal detection circuit connected to the second terminal of the second current mirror circuit;

a current monitor terminal connected to the third terminal of the second current mirror circuit; and

a voltage source connected to the third terminal of the second current mirror circuit for supplying a bias to the other of the paired current path of the second current mirror circuit

20

2. The optical receiver according to claim 1, wherein the voltage source comprises a power supply for providing the bias and a diode connected to the power supply.

3. The optical receiver according to claim 2, wherein the voltage source further comprises a first resistor and a second resistor serially connected to the first resistor, the first resistor being connected to the power supply and the diode, the second resistor being connected to the diode and a ground, the first and second resistors dividing the power supply and generating the bias.

4. The optical receiver according to claim 1, wherein the bias supplied from the voltage source is greater than 1.5V and smaller than 2.5V.

5. The optical receiver according to claim 1, wherein the photo diode is an avalanche photo diode.

6. The optical receiver according to claim 5, further comprises a high voltage source for supplying a bias potential to the photo diode, wherein the pair of the current path of the first current mirror circuit is connected to the high voltage source and the avalanche photo diode is biased by the high voltage source through the first current mirror circuit.